Vol. 32, 1989

Author Index / Index des auteurs

Aguirre, A. see Vicario, A., 908
Alahiotis, S.N. see Goulielmos, G.N., 146
Albella, B. see Jouve, N., 735
Albertsen, M.C. see Skorupska, H., 1091
Albini, S.M. see Jones, G.H., 611
Allison, L.A., and Shields, G.F. A cytological desription of *Eusimulium vernum, E. decolletum*, and the *E. pugetense* complex (Diptera: Simuliidae) in Alaska, 550
Altman, D.W. see Stelly, D.M., 762
Alvarez, M.C. see López, J.R., 35
Alvarez-Sarret, E. see Lamborot, M., 393
Anderson, J.B. see Hintz, W.E.A., 173
Anderson, L.K. see Stack, S.M., 486
Anderson, L.K. see Sherman, J.D., 743
Appels, R. see Clarke, B.C., 334
Appels, R. see Capesius, I., 343
Appels, R. see Reddy, P., 456
Appels, R. see Lagudah, E.S., 1017
Archer, S. see Clark, M., 925
Asay, K.H. see Jensen, K.B., 640
Asay, K.H. see Hsiao, C., 1079
Azmi, T.I. see Harisah, M., 999
Bachelier, B. De Buyser, J., 54
Baenziger, P.S. see Youssef, S.S., 622
Baenziger, P.S. see Kudirka, D.T., 1068
Bagga, P.S., Sharma, S., and Sandhu, D.K. Developmentally related changes in the production and expression of endo-β-1,4-glucanases in *Aspergillus nidulans*, 288
Baillie, D.L. see Heschl, M.F.P., 190
Banks, P., Britten, E.J., and Gordon, G.H. *Para*-Fluorophenylalanine-induced chromosome number changes in higher plants. I. Maize, 962
Barker, J.S.F. see Knibb, W.R., 754
Barreneche, M.T. see Croullebois, M.L., 203
Basrur, P.K. see Harisah, M., 999
Bass, J.A.B. see Brockhouse, C., 510
Bass, J.A.B. see Brockhouse, C., 516
Beacham, T.D. Genetic variation in body weight of pink salmon (*Oncorhynchus gorbuscha*), 227
Beaton, M.J., and Hebert, P.D.N. Miniature genomes and endopolyploidy in cladoceran crustaceans, 1048
Bedo, D.G. A cytological study of *Simulium ruficorne* (Diptera: Simuliidae) and its relationship to the *S. ornatipes* species complex, 570
Bedo, D.G. Fluorescence banding in the mitotic and meiotic chromosomes of the Mediterranean fruit fly, *Ceratitis capitata* (Diptera: Tephritidae), 580
Bennett, M.D. see Johnson, M.A.T., 328
Bennett, M.D. see Laurie, D.A., 953
Bernelot-Moens, C. see Moens, P.B., 601
Berville, A. see Bonavent, J.-F., 322
Bessone, L. see Bonavent, J.-F., 322
Bhambhani, R.N. see Kuspira, J., 869
Birouk, A., et Dattée, Y. Organisation de la variabilité enzymatique des populations marocaines de luzerne (*Medicago sativa* L.) : structures géniques et génotypiques, 120
Birt, T.P. see Davidson, W.S., 340
Bogdanov, Y.F. see Fedotova, Y.S., 816
Bojko, M. Two kinds of "recombination nodules" in *Neurospora crassa*, 309
Bonavent, J.-F., Bessone, L., Geny, A., Berville, A., Denizot, J.-P., and Brian, C. A possible origin for the sugar beet cytoplasmic male sterility source Owen, 322
Bongso, T.A. see Harisah, M., 999
Bougerol, B., and Pham J.-L. Influence of the *Oryza sativa* genotype on the fertility and quantitative traits of F_1 hybrids between the two cultivated rice species *O. sativa* L. and *O. glaberrima* Steud, 810
Brandham, P.E. see Johnson, M.A.T., 328
Brandle, J.E., and McVetty, P.B.E. Effects of inbreeding and estimates of additive genetic variance within seven summer oilseed rape cultivars, 115
Brian, C. see Bonavent, J.-F., 322
Britten, E.J. see Banks, P., 962
Brockhouse, C., Bass, J.A.B., and Straus, N.A. Chromocentre polymorphism in polytene chromosomes of *Simulium costatum* (Diptera: Simuliidae), 510
Brockhouse, C., Bass, J.A.B., Feraday, R.M., and Straus, N.A. Supernumerary chromosome evolution in the *Simulium vernum* group (Diptera: Simuliidae), 516
Brockhouse, C.L. see Feraday, R.M., 538
Brule-Babel, A.L., and Fowler, D.B. Genetic control of cold hardiness and vernalization requirement in rye, 19
Burgos, M. see Sánchez, A., 978
Bushuk, W. see Howes, N.K., 1096
Capesius, I., and Appels, R. The direct measurement of ribosomal RNA gene activity in wheat – rye hybrids, 343
Carrillo, J.M. see Orellana, J., 169
Chang, M.T., and Neuffer, M.G. Maize microsporogenesis, 232
Chaganti, R.S.K. see Koduru, P.R.K., 24
Chen, Z.-Q., Lin, C.C., and Hodgetts, R.B. Cloning and characterization of a tandemly repeated DNA sequence in the crane family (Gruidae), 646
Chetelat, R.T., Rick, C.M., and DeVerna, J.W. Isozyme analysis, chromosome pairing, and fertility of *Lycopersicon esculentum* × *Solanum lycopersicoides* diploid backcross hybrids, 783
Chèvre, A.M. see Jahier, J., 408
Choo, T.M. Linearity of offspring – parent regression in barley, 719
Choubey, R.N. see Zadoo, S.N., 972
Christie, B.R. see Hernández-Fernández, M.N., 318
Chung, Y.S. see Rivard, S.R., 660
Clark, M., Karp, A., and Archer, S. Physical mapping of the B-hordein loci on barley chromosome 5 by *in situ* hybridization, 925
Clarke, B.C., Moran, L.B., and Appels, R. DNA analyses in wheat breeding, 334
Clarke, B.C. see Lagudah, E.S., 1017
Close, R.L. see Eldridge, M.D.B., 935
Comeau, A. see Plourde, A., 282
Commiskey, E. see Stelly, D.M., 762
Cornu, A., Farcy, E., and Mousset, C. A genetic basis for

Printed in Canada / Imprimé au Canada

variations in meiotic recombination in *Petunia hybrida*, 46
Côté, J.-C. see Rivard, S.R., 660
Crane, C.F., and Sleper, D.A. A model of meiotic chromosome association in triploids, 82
Crane, C.F., and Sleper, D.A. A model of meiotic chromosome association in tetraploids, 691
Crane, C.F. see Kopyto, R., 708
Croullebois, M.L., Barreneche, M.T., de Cherisey, H., and Pernes, J. Intraspecific differentiation of *Setaria italica* (L.) P.B.: study of abnormalities (weakness, segregation distortion, and partial sterility) observed in F_1 and F_2 generations, 203
Cullis, C.A. see Zimmerman, P.A., 824
Dange, M.P. see Yadav, J.S., 165
Dattée, Y. see Birouk, A., 120
Davidson, W.S., Birt, T.P., and Green, J.M. Organisation of the mitochondrial genome from Atlantic salmon (*Salmo salar*), 340
Dawood, M.R. see Howes, N.K., 1096
De Buyser, J., Bachelier, B., and Henry, Y. Gametic selection during wheat anther culture, 54
de Cherisey, H. see Croullebois, M.L., 203
de Jong, J.H., van Eden, J., and Sybenga, J. Synaptonemal complex formation and metaphase I configuration patterns in a translocation heterozygote of rye (*Secale cereale*), 72
de Jong, J.H. see Naranjo, T., 983
de la Guardia, R.D. see Sánchez, A., 978
Denizot, J.-P. see Bonavent, J.-F., 322
Dennis, E.S. see Mitchell, L.E., 349
DeVerna, J.W. see Chetelat, R.T., 783
Dewey, D.R. see Hsiao, C., 1079
Diaz, F. see Jouve, N., 735
Dollin, A.E., Murray, J.D., and Gillies, C.B. Synaptonemal complex analysis of hybrid cattle. I. Pachytene substaging and the normal full bloods, 856
Drouin, R., and Richer, C.-L. High-resolution R-banding at the 1250-band level. II. Schematic representation and nomenclature of human RBG-banded chromosomes, 425
Dvořák, J., Zhang, H.-B., Kota, R.S., and Lassner, M. Organization and evolution of the 5S ribosomal RNA gene family in wheat and related species, 1003
Eber, F. see Jahier, J., 408
Eberl, D.F., Hilliker, A.J., Sharp, C.B., and Trusis-Coulter, S.N. Further observations on the nature of radiation-induced chromosomal interchanges recovered from *Drosophila* sperm, 847
Eizenga, G.C. Meiotic analyses of tall fescue somaclones, 373
Eldridge, M.D.B., Johnston, P.G., Close, R.L., and Lowry, P.S. Chromosomal rearrangements in rock wallabies, *Petrogale* (Marsupialia: Macropodidae). II. G-banding analysis of *Petrogale godmani*, 935
Endrizzi, J.E. see Myles, E.L., Jr., 12
Endrizzi, J.E., and Nelson, R. Linkage analysis and arm location of the open bud (ob_1) and yellow petal (Y_2) loci in chromosome 18 of cotton, 1041
Estilai, A. see Hashemi, A., 134
Estilai, A. see Hashemi, A., 1100
Estomba, A. see Vicario, A., 908
Fang, G.H., and McVetty, P.B.E. Inheritance of male fertility restoration and allelism of restorer genes for the Polima cytoplasmic male sterility system in oilseed rape, 1044
Farcy, E. see Cornu, A., 46
Fedak, G. see Plourde, A., 282
Fedak, G. see Gupta, P.K., 383
Fedak, G. see Molnar, S.J., 1124
Fedotova, Y.S., Kolomiets, O.L., and Bogdanov, Y.F. Synaptonemal complex transformations in rye microsporocytes at the diplotene stage of meiosis, 816
Feraday, R.M. see Brockhouse, C., 516
Feraday, R.M., Leonhardt, K.G. Absence of population structure in black flies as revealed by enzyme electrophoresis, 531
Feraday, R.M., Leonhardt, K.G., and Brockhouse, C.L. The role of sex chromosomes in black fly evolution, 538
Feraday, R.M. see Leonhardt, K.G., 543
Fernández-Piqueras, J. see Sentís, C., 208
Fernández-Rueda, P. see Naranjo, T., 293
Fields, M.J. see Lloyd, M.A., 865
Fisk, J.H. Karyotype and achiasmatic female meiosis in *Helicoverpa armigera* (Hübner) and *H. punctigera* (Wallengren) (Lepidoptera: Noctuidae), 967
Foltz, D.W. see Katoh, M., 687
Fontdevila, A. see Naveira, H., 262
Forster, B.P., and Miller, T.E. Genome relationship between *Thinopyrum bessarabicum* and *Thinopyrum elongatum*, 930
Fowler, D.B. see Brule-Babel, A.L., 19
Fowler, D.B. see Limin, A.E., 667
Friars, G.W. see Winkelman, D.C., 791
Friars, G.W. see Hanke, A.R., 1105
Fung, E. see Mably, E.R., 1026
Galindo, C. see Jouve, N., 735
Galindo, C., and Jouve, N. C-banding in meiosis: an approach to the study of wheat and rye genome interactions in triticale, 1074
Gallais, A. Concepts of varietal value and of test value in autotetraploids. Application to genetic advance in population improvement, 420
Ganal, M.W. see Lapitan, N.L.V., 992
García de la Vega, C. see Suja, J.A., 64
Garcia, P. see Jouve, N., 735
Geny, A. see Bonavent, J.-F., 322
Gill, B.S. see Kam-Morgan, L.N.W., 724
Gillies, C.B. see Dollin, A.E., 856
Gillies, C.B., and Lukaszewski, A.J. Synaptonemal complex formation in rye (*Secale cereale*) heterozygous for telomeric C-bands, 901
Giménez-Abián, J.F., Giménez-Martín, G., Suja, J.A., and Rufas, J.S. Nucleolar organizer regions are associated with silver-stained chromatid cores in meiotic chromosomes of grasshoppers, 829
Giménez-Martín, G. see Giménez-Abián, J.F., 829
Giráldez, R. see Naranjo, T., 293
Goicoechea, P.G. see Naranjo, T., 293
Goicoechea, P.G. see Naranjo, T., 983
Gooding, R.H. Genetic basis of sterility in hybrids from crosses of *Glossina morsitans submorsitans* and *Glossina morsitans morsitans* (Diptera: Glossinidae), 479
Gordon, G.H. see Banks, P., 962
Gosálvez, J., López-Fernández, C., and Goyanes, V. Detection of cryptic bands by *Alu*I in eukaryotic chromosomes, 672
Goulielmos, G.N., and Alahiotis, S.N. Interspecific hybridization between *Drosophila* species group *melanogaster* sibling species: isozymic patterns and reproductive relationships, 146
Goyanes, V. see Gosálvez, J., 672
Graves, J.A.M. see Zelesco, P.A., 271
Green, J.M. see Davidson, W.S., 340
Greenbaum, I.F. see Sudman, P.D., 380
Grunewald, J. see Weber, E.A., 589
Gupta, P.K., Fedak, G., Molnar, S.J., and Wheatcroft, R.

Distribution of a *Secale cereale* DNA repeat sequence among 25 *Hordeum* species, 383
Gupta, S.K. see Zadoo, S.N., 972
Hanke, A.R., Friars, G.W., Saunders, R.L., and Terhune, J.M. Family × photoperiod interaction on growth in juvenile Atlantic salmon, *Salmo salar*, 1105
Harisah, M., Azmi, T.I., Hilmi, M., Vidyadaran, M.K., Bongso, T.A., Nava, Z.M., Momongan, V., and Basrur, P.K. Identification of crossbred buffalo genotypes and their chromosome segregation patterns, 999
Hartley, S.E. see Pleyte, K.A., 129
Hashemi, A., Estilai, A., and Waines, J.G. Cytogenetic analyses of intersectional hybrids between *Parthenium argentatum* and *Parthenium confertum*, 134
Hashemi, A., Estilai, A., and Waines, J.G. Cytogenetics and reproductive behavior of induced and natural tetraploid guayule (*Parthenium argentatum* Gray), 1100
Hauschteck-Jungen, E. see Naveira, H., 262
Hebert, P.D.N. see Beaton, M.J., 1048
Hennig, U.G.G. see Rudd, N.L., 196
Henry, Y. see De Buyser, J., 54
Hernández-Fernández, M.M., and Christie, B.R. Inheritance of somatic embryogenesis in alfalfa (*Medicago sativa* L.), 318
Heschl, M.F.P., and Baillie, D.L. Identification of a heat-shock pseudogene from *Caenorhabditis elegans*, 190
Hilliker, A.J. see Sharp, C.B., 840
Hilliker, A.J. see Eberl, D.F., 847
Hilmi, M. see Harisah, M., 999
Hintz, W.E.A., Anderson, J.B., and Horgen , P.A. Relatedness of three species of *Agaricus* inferred from restriction fragment length polymorphism analysis of the ribosomal DNA repeat and mitochondrial DNA, 173
Hoar, D.I. see Rudd, N.L., 196
Hodgetts, R.B. see Chen, Z.-Q., 646
Horgen, P.A. see Hintz, W.E.A., 173
Howell, A.M. see Starr, T., 365
Howes, N.K., Kovacs, M.I., Leisle, D., Dawood, M.R., and Bushuk, W. Screening of durum wheats for pasta-making quality with monoclonal antibodies for gliadin 45, 1096
Hsiao, C. see Jensen, K.B., 640
Hsiao, C. see Wang, R.R.-C., 802
Hsiao, C., Asay, K.H., and Dewey, D.R. Cytogenetic analysis of interspecific hybrids and amphiploids between two diploid crested wheatgrasses, *Agropyron mongolicum* and *A. cristatum*, 1079
Huang, J.Y. see Shang, X.M., 216
Hunter, F.F. The polytene chromosomes of *Simulium furculatum* (Shewell) (Diptera: Simuliidae), 522
Hymowitz, T. see Singh, R.J., 796
Ingleby, S. see Murray, J.D., 1119
Jackson, R.C. see Shang, X.M., 216
Jacobsen, N. see Linde-Laursen, I., 629
Jahier, J., Chèvre, A.M., Tanguy, A.M., and Eber, F. Extraction of disomic addition lines of *Brassica napus – B. nigra*, 408
Jana, S., Zhang, Q., and Saghai-Maroof, M.A. Influence of environments on the development of multivariate structures in a barley composite cross at three locations, 40
Jena, K.K., and Khush, G.S. Monosomic alien addition lines of rice: production, morphology, cytology, and breeding behavior, 449
Jensen, K.B. Cytology, fertility, and origin of *Elymus abolinii* (Drob.) Tzvelev and its F_1 hybrids with *Pseudoroegneria spicata, E. lanceolatus, E. dentatus* ssp. *ugamicus*, and *E. drobovii* (Poaceae: Triticeae), 468
Jensen, K.B., Hsiao, C., and Asay, K.H. Genomic and taxonomic relationships of *Agropyron vaillantianum* and *E. arizonicus* (Poacea: Triticeae), 640
Jiménez, R. see Sánchez, A., 978
Johnson, M.A.T., Kenton, A.Y., Bennett, M.D., and Brandham, P.E. *Voanioala gerardii* has the highest known chromosome number in the monocotyledons, 328
Johnston, P.G. see Eldridge, M.D.B., 935
Jones, G.H., Whitehorn, J.A.F., and Albini, S.M. Ultrastructure of meiotic pairing in B chromosomes of *Crepis capillaris*. I. One-B and two-B pollen mother cells, 611
Jongedijk, E., and Ramanna, M.S. Synaptic mutants in potato, *Solanum tuberosum* L. II. Concurrent reduction of chiasma frequencies in male and female meiosis of *ds-1* (desynapsis) mutants, 1054
Jouve, N., Galindo, C., Mesta, M., Diaz, F., Albella, B., Garcia, P., and Soler, C. Changes in triticale chromosome heterochromatin visualized by C-banding, 735
Jouve, N. see Galindo, C., 1074
Juan, C., and Petitpierre, E. C-banding and DNA content in seven species of Tenebrionidae (Coleoptera), 834
Kalogeropoulos, A., and Rossignol, J.-L. Nonrandom transition from asymmetrical to symmetrical hybrid DNA during meiotic recombination, 414
Kam-Morgan, L.N.W., Gill, B.S., and Muthukrishnan, S. DNA restriction fragment length polymorphisms: a strategy for genetic mapping of D genome of wheat, 724
Karp, A. see Clark, M., 925
Katoh, M., and Foltz, D.W. Biochemical evidence for the existence of a null allele at the leucine aminopeptidase-2 (*Lap-2*) locus in the oyster *Crassostrea virginica* (Gmelin), 687
Kenton, A.Y. see Johnson, M.A.T., 328
Khush, G.S. see Jena, K.K., 449
Kim, N.-S. see Kuspira, J., 869
Kimber, G., and Yen, Y. Hybrids involving wheat relatives and autotetraploid *Triticum umbellulatum*, 1
Knapp, S.J., and Tagliani, L.A. Genetics of allozyme variation in *Cuphea lanceolata* Ait., 57
Knibb, W.R., Barker, J.S.F., and Oakeshott, J.G. The genetics of *abnormal abdomen, incomplete abdomen*, and *bobbed* in *Drosophila buzzatii*, 754
Knott, D.R. The mode of inheritance of a type of dwarfism in common wheat, 932
Knowles, P. see Perry, D.J., 245
Koduru, P.R.K., and Chaganti, R.S.K. Meiotic chromosome segregation in human t(11;22)(q23;q11) carriers: a theoretical consideration, 24
Kohel, R.J. see Stelly, D.M., 762
Kohler, C.D., Schaadt, C.P., and Vekemans, M.J.J. Chromosome banding studies of the osprey *Pandion haliaetus* (Aves, Falconiformes), 1037
Kollipara, K.P. see Singh, R.J., 796
Kolodziejczyk, S. see Moens, P.B., 596
Kolomiets, O.L. see Fedotova, Y.S., 816
Kopyto, R., Crane, C.F., and Sleper, D.A. Effect of temperature on meiosis and fertility in *Festuca mairei* × *Festuca arundinacea* var. *glaucescens*, 708
Kota, R.S. see Dvořák, J., 1003
Koulin, G. see Noda, K., 257
Kovacs, M.I. see Howes, N.K., 1096
Kudirka, D.T., Schaeffer, G.W., and Baenziger, P.S. Stability of ploidy in meristems of plants regenerated from anther calli

of wheat (*Triticum aestivum* L. em. Thell.), 1068
Kuspira, J., Maclagan, J., Bhambhani, R.N., Sadasivaiah, R.S., and Kim, N.-S. Genetic and cytogenetic analyses of the A genome of *Triticum monococcum* L. V. Inheritance and linkage relationships of genes determining the expression of 12 qualitative characters, 869
Lagudah, E.S., Clarke, B.C., and Appels, R. Phylogenetic relationships of *Triticum tauschii*, the D-genome donor to hexaploid wheat. 4. Variation and chromosomal location of 5S DNA, 1017
Lakhotia, S.C. see Nath, B.B., 676
Lamborot, M., and Alvarez-Sarret, E. Karyotypic characterization of some *Liolaemus* lizards in Chile (Iguanidae), 393
Langholz, K.D. see Skorupska, H., 1091
Lang-Unnasch, N. see Zimmerman, P.A., 824
Lapitan, N.L.V., Ganal, M.W., and Tanksley, S.D. Somatic chromosome karyotype of tomato based on *in situ* hybridization of the TGRI satellite repeat, 992
Lassner, M. see Dvořák, J., 1003
Laurie, D.A., and Bennett, M.D. The timing of chromosome elimination in hexaploid wheat × maize crosses, 953
Laurie, D.A. The frequency of fertilization in wheat × pearl millet crosses, 1063
Leggett, J.M. Interspecific diploid hybrids in *Avena*, 346
Leisle, D. see Howes, N.K., 1096
Leonard, M. see Stadler, J., 475
Leonhardt, K.G. see Feraday, R.M., 531
Leonhardt, K.G. see Feraday, R.M., 538
Leonhardt, K.G., and Feraday, R.M. Sex chromosome evolution and population differentiation in the *Eusimulium aureum* group of black flies, 543
Li, R., Stelly, D.M., and Trolinder, N.L. Cytogenetic abnormalities in cotton (*Gossypium hirsutum* L.) cell cultures, 1128
Limin, A.E., and Fowler, D.B. The influence of cell size and chromosome dosage on cold-hardiness expression in the Triticeae, 667
Lin, C.C. see Chen, Z.-Q., 646
Linde-Laursen, I., von Bothmer, R., and Jacobsen, N. Giemsa C-banded karyotypes of *Hordeum marinum* and *H. murinum*, 629
Liu, Z.-W., and Wang, R.R.-C. Genome analysis of *Thinopyrum caespitosum*, 141
Lloyd, M.A., Fields, M.J., and Thorgaard, G.H. BKm minisatellite sequences are not sex associated but reveal DNA fingerprint polymorphisms in rainbow trout, 865
López, J.R., Alvarez, M.C., Thode, G., and Martinez, G. Karyotype divergence in *Symphodus melops* and *Symphodus roissali* (Labridae, Perciforms): C-banded and Ag-NOR karyotypes, 35
López-Fernández, C. see Gosálvez, J., 672
Lostao, C. see Vicario, A., 908
Lowry, P.S. see Eldridge, M.D.B., 935
Lukaszewski, A.J. see Gillies, C.B., 901
Mably, E.R., Fung, E., and Snyder, F.F. Genetic deficiency of purine nucleoside phosphorylase in the mouse. Characterization of partially and severely enzyme deficient mutants, 1026
Maclagan, J. see Kuspira, J., 869
Martinez, G. see López, J.R., 35
Mazón, L.I. see Vicario, A., 908
McCoy, T.J., and Quarisa, G.L. Allotetraploid behavior of hybrids of *Medicago sativa* L. and *M. papillosa* Boiss., 6
McCoy, T.J. A potential solution to the chromosome instability problem in hexaploid alfalfa, *Medicago sativa* L., 302
McDowall, J. see Starr, T., 365
McKay, G.M. see Murray, J.D., 1119
McKay, L.R. see Winkelman, D.C., 791
McMillan, I. see Winkelman, D.C., 791
McVetty, P.B.E. see Brandle, J.E., 115
McVetty, P.B.E. see Fang, G.H., 1044
Mengesha, M.H. see Rao, Y.S., 404
Mesta, M. see Jouve, N., 735
Miller, T.E. see Forster, B.P., 930
Mitchell, L.E., Dennis, E.S., and Peacock, W.J. Molecular analysis of an alcohol dehydrogenase (*Adh*) gene from chromosome 1 of wheat, 349
Moens, P.B. see Spyropoulos, B., 275
Moens, P.B., and Kolodziejczyk, S. Isozymes of amylase, alcohol dehydrogenase, malic enzyme, malate dehydrogenase, and superoxide dismutase in *Chloealtis conspersa* (Orthoptera), 596
Moens, P.B., Bernelot-Moens, C., and Spyropoulos, B. Chromosome core attachment to the meiotic nuclear envelope regulates synapsis in *Chloealtis* (Orthoptera), 601
Molnar, S.J. see Gupta, P.K., 383
Molnar, S.J., and Fedak, G. Polymorphism in ribosomal DNA repeat units of 12 *Hordeum* species, 1124
Momongan, V. see Harisah, M., 999
Moran, L.B. see Clarke, B.C., 334
Morris, R. see Youssef, S.S., 622
Mousset, C. see Cornu, A., 46
Murray, J.D. see Dollin, A.E., 856
Murray, J.D., McKay, G.M., Winter, J.W., and Ingleby, S. Cytogenetics of the Herbert River ringtail possum, *Pseudocheirus herbertensis* (Diprotodonta: Pseudocheiridae): evidence for two species, 1119
Muthukrishnan, S. see Kam-Morgan, L.N.W., 724
Myles, E.L., Jr., and Endrizzi, J.E. Aneuploids induced by deficiencies of chromosome 9 and analysis of the time of nondisjunction in cotton, 12
Naranjo, T., Fernández-Rueda, P., Goicoechea, P.G., Roca, A., and Giráldez, R. Homoeologous pairing and recombination between the long arms of group 1 chromosomes in wheat × rye hybrids, 293
Naranjo, T., Roca, A., Goicoechea, P.G., de Jong, J.H., and Smilde, W.D. Comparison between synaptonemal complexes at pachytene and chromosome association at metaphase I in heterozygotes for a "nonreciprocal" translocation of rye, 983
Nath, B.B., and Lakhotia, S.C. Heat-shock response in a tropical *Chironomus*: seasonal variation in response and the effect of developmental stage and tissue type on heat shock protein synthesis, 676
Nava, Z.M. see Harisah, M., 999
Naveira, H., Hauschteck-Jungen, E., and Fontdevila, A. Evolutionary history of *Drosophila buzzatii*. XV. Meiosis of inversion heterozygotes in backcross hybrids between *D. buzzatii* and its sibling *D. koepferae*, 262
Nelson, R. see Endrizzi, J.E., 1041
Neuffer, M.G. see Chang, M.T., 232
Nguyen, H.T. see Shang, X.M., 216
Noda, K., and Koulin, G. Chromosome structural changes and their role in the evolution of tetraploid wheats, 257
Noda, K. see Tsujimoto, H., 1085
Oakeshott, J.G. see Knibb, W.R., 754
Orellana, J., Vazquez, J.F., and Carrillo, J.M. Genome analysis in wheat – rye – *Aegilops caudata* trigeneric hybrids, 169
Palmer, R.G. see Skorupska, H., 1091

Papa, C.M. see Youssef, S.S., 622
Peacock, W.J. see Mitchell, L.E., 349
Pernes, J. see Croullebois, M.L., 203
Pernès, J. see Robert, T., 946
Perry, D.J., and Knowles, P. Inheritance and linkage relationships of allozymes of eastern white cedar (*Thuja occidentalis*) in northwestern Ontario, 245
Peters, D.C. see Puterka, G.J., 109
Peters, K. see Starr, T., 365
Petitpierre, E. see Juan, C., 834
Pham, J.-L. see Bougerol, B., 810
Phillips, R. see Stadler, J., 475
Phillips, R.B. see Pleyte, K.A., 129
Pleyte, K.A., Phillips, R.B., and Hartley, S.E. Q-band chromosomal polymorphisms in arctic char (*Salvelinus alpinus*), 129
Plourde, A., Comeau, A., Fedak, G., and St-Pierre, C.-A. Intergeneric hybrids of *Triticum aestivum* × *Leymus multicaulis*, 282
Procunier, W.S. Cytological approaches to simuliid biosystematics in relation to the epidemiology and control of human onchocerciasis, 559
Puterka, G.J., and Peters, D.C. Inheritance of greenbug, *Schizaphis graminum* (Rondani), virulence to *Gb2* and *Gb3* resistance genes in wheat, 109
Quarisa, G.L. see McCoy, T.J., 6
Rajora, O.P., and Zsuffa, L. Multilocus genetic structure, characterization, and relationships of *Populus* × *canadensis* cultivars, 99
Rajora, O.P. Genetic structure and identification of *Populus deltoides* clones based on allozymes, 440
Rajora, O.P. Erratum: Genetic structure and identification of *Populus deltoides* clones based on allozymes, 733
Rajora, O.P., and Zsuffa, L. Erratum: Multilocus genetic structure, characterization, and relationships of *Populus* × *canadensis* cultivars, 733
Ramanna, M.S. see Jongedijk, E., 1054
Rangan, T.S. see Stelly, D.M., 762
Rao, S.A. see Rao, Y.S., 404
Rao, Y.S., Mengesha, M.H., and Rao, S.A. Cytomorphological studies of a spontaneous triploid in *Pennisetum hohenackeri* Hochst. ex Steud., 404
Reddy, P., and Appels, R. A second locus for the 5S multigene family in *Secale* L.: sequence divergence in two lineages of the family, 456
Richer, C.-L. see Drouin, R., 425
Rick, C.M. see Chetelat, R.T., 783
Rivard, S.R., Côté, J.-C., et Chung, Y.S. Comparaison des profils plasmidiques de mutants oligosporogènes chez *Bacillus thuringiensis* var. *kurstaki* HD-1 après traitement à l'ozone et à la nitrosoguanidine, 660
Robert, T., Sarr, A., et Pernès, J. Sélections sur la phase haploïde chez le Mil (*Pennisetum typhoides* (Burm.) Stapf et Hubb.) : effet de la température, 946
Roca, A. see Naranjo, T., 293
Roca, A. see Naranjo, T., 983
Rose, A.M. see Starr, T., 365
Rossignol, J.-L. see Kalogeropoulos, A., 414
Rothfels, K. Speciation in black flies, 500
Rudd, N.L., Hoar, D.I., Williams, S.E., and Hennig, U.G.G. Genotype and the cryopreservation process affect the levels of aneuploidy and chromosome breakage in cultured human fibroblasts, 196
Rufas, J.S. see Suja, J.A., 64
Rufas, J.S. see Giménez-Abián, J.F., 829
Sadasivaiah, R.S. see Kuspira, J., 869
Saghai-Maroof, M.A. see Jana, S., 40
Sánchez, A., Burgos, M., Jiménez, R., and de la Guardia, R.D. Quantitative analysis of silver staining of the nucleolar organizing region in *Eliomys quercinus*, 978
Sandhu, D.K. see Bagga, P.S., 288
Santos, J. see Sentís, C., 208
Sarr, A. see Robert, T., 946
Sashai-Maroof, A. see Jana, S., 40
Saunders, R.L. see Hanke, A.R., 1105
Schaadt, C.P. see Kohler, C.D., 1037
Schaeffer, G.W. see Kudirka, D.T., 1068
Sen, S., Talukder, G., and Sharma, A. Chromosomal alterations and DNA content in rats during ageing, 389
Sentís, C., Santos, J., and Fernández-Piqueras, J. Breaking up the chromosomes of *Baetica ustulata* by in situ treatments with restriction endonucleases, 208
Shanahan, C.M. Cytogenetics of Australian scorpions. I. Interchange polymorphism in the family Buthidae, 882
Shanahan, C.M. Cytogenetics of Australian scorpions. II. Chromosome polymorphism in species of *Urodacus* (family Scorpionidae), 890
Shang, X.M., Jackson, R.C., Nguyen, H.T., and Huang, J.Y. Chromosome pairing in the *Triticum monococcum* complex: evidence for pairing control genes, 216
Sharma, A. see Sen, S., 389
Sharma, S. see Bagga, P.S., 288
Sharp, C.B., and Hilliker, A.J. Linkage and segregation distortion in *Drosophila melanogaster*, 840
Sharp, C.B. see Eberl, D.F., 847
Sherman, J.D. see Stack, S.M., 486
Sherman, J.D., Stack, S.M., and Anderson, L.K. Two-dimensional spreads of synaptonemal complexes from solanaceous plants. IV. Synaptic irregularities, 743
Shields, G.F. see Allison, L.A., 550
Shintaku, Y., Yamamoto, K., and Takeda, G. Chromosomal variation in hybrids between *Nicotiana repanda* Willd. and *N. tabacum* L. through pollen and egg-cell irradiation techniques, 251
Singh, R.J., Kollipara, K.P., and Hymowitz, T. Ancestors of 80- and 78-chromosome *Glycine tomentella* Hayata (Leguminosae), 796
Skorupska, H., Albertsen, M.C., Langholz, K.D., and Palmer, R.G. Detection of ribosomal RNA genes in soybean, *Glycine max* (L.) Merr., by *in situ* hybridization, 1091
Sleper, D.A. see Crane, C.F., 82
Sleper, D.A. see Crane, C.F., 691
Sleper, D.A. see Kopyto, R., 708
Smilde, W.D. see Naranjo, T., 983
Snyder, F.F. see Mably, E.R., 1026
Soler, C. see Jouve, N., 735
Soltis, D.E. see Wolf, P.G., 655
Soltis, P.S. see Wolf, P.G., 655
Spyropoulos, B., Wise, D., and Moens, P.B. Localized recombination nodules and sex chromosome behavior in the male mole cricket, *Neocurtilla hexadactyla*, 275
Spyropoulos, B. see Moens, P.B., 601
Stack, S.M., Anderson, L.K., and Sherman, J.D. Chiasmata and recombination nodules in *Lilium longiflorum*, 486

Stack, S.M. see Sherman, J.D., 743
Stadler, J., Phillips, R., and Leonard, M. Mitotic blocking agents for suspension cultures of maize 'Black Mexican Sweet' cell lines, 475
Staiber, W. Multivalent formation and pairing behavior of germ line limited chromosomes in male meiosis of *Acricotopus lucidus* (Diptera, Chironomidae), 941
Starr, T., Howell, A.M., McDowall, J., Peters, K., and Rose, A.M. Isolation and mapping of DNA probes within the linkage group I gene cluster of *Caenorhabditis elegans*, 365
Stelly, D.M., Altman, D.W., Kohel, R.J., Rangan, T.S., and Commiskey, E. Cytogenetic abnormalities of cotton somaclones from callus cultures, 762
Stelly, D.M. see Li, R., 1128
St-Pierre, C.-A. see Plourde, A., 282
Straus, N.A. see Brockhouse, C., 510
Straus, N.A. see Brockhouse, C., 516
Sudman, P.D., and Greenbaum, I.F. Visualization of kinetochores in mammalian meiotic preparations and observations of argentophilic differences between mitotic and meiotic kinetochores, 380
Suja, J.A., García de la Vega, C., and Rufas, J.S. Mechanisms promoting the appearance of abnormal spermatids in B-carrier individuals of *Eyprepocnemis plorans* (Orthoptera), 64
Suja, J.A. see Giménez-Abián, J.F., 829
Sybenga, J. see de Jong, J.H., 72
Sybenga, J. see Zadoo, S.N., 972
Tagliani, L.A. see Knapp, S.J., 57
Tai, G.C.C. A new procedure to construct confidence intervals for genotypic variance and expected response to selection, 307
Takeda, G. see Shintaku, Y., 251
Talukder, G. see Sen, S., 389
Tanguy, A.M. see Jahier, J., 408
Tanksley, S.D. see Lapitan, N.L.V., 992
Tanksley, S.D. see Wang, Z.Y., 1113
Terhune, J.M. see Hanke, A.R., 1105
Thode, G. see López, J.R., 35
Thomas, J.B. see Whelan, E.D.P., 1033
Thorgaard, G.H. see Lloyd, M.A., 865
Tosa, Y. Genetic analysis of the avirulence of wheatgrass powdery mildew fungus on common wheat, 913
Tosa, Y. Evidence on wheat for gene-for-gene relationship between formae speciales of *Erysiphe graminis* and genera of gramineous plants, 918
Trolinder, N.L. see Li, R., 1128
Trusis-Coulter, S.N. see Eberl, D.F., 847
Tsujimoto, H., and Noda, K. Structure of chromosome 5A of wheat speltoid mutants induced by the gametocidal genes of *Aegilops speltoides*, 1085
Tyson, H. Comparisons of unweighted with weighted least squares methods of fitting a genetic model to a diallel cross, 771
van Eden, J. see de Jong, J.H., 72
Vazquez, J.F. see Orellana, J., 169
Vekemans, M.J.J. see Kohler, C.D., 1037
Vicario, A., Mazón, L.I., Aguirre, A., Estomba, A., and Lostao, C. Relationships between environmental factors and morph polymorphism in *Cepaea nemoralis*, using canonical correlation analysis, 908
Vidyadaran, M.K. see Harisah, M., 999
von Bothmer, R. see Linde-Laursen, I., 629
Waines, J.G. see Hashemi, A., 134
Waines, J.G. see Hashemi, A., 1100
Wang, R.R.-C. see Liu, Z.-W., 141
Wang, R.R.-C. An assessment of genome analysis based on chromosome pairing in hybrids of perennial Triticeae, 179
Wang, R.R.-C., and Hsiao, C. Genome relationship between *Thinopyrum bessarabicum* and *T. elongatum*: revisited, 802
Wang, Z.Y., and Tanksley, S.D. Restriction fragment length polymorphism in *Oryza sativa* L., 1113
Weber, D.F. see Zhao, Z.-Y., 155
Weber, E.A., and Grunewald, J. Cytotaxonomic differentiation of *Wilhelmia equina* (Linné, 1747) and *Wilhelmia lineata* (Meigen, 1804) (Diptera: Simuliidae), 589
Wheatcroft, R. see Gupta, P.K., 383
Whelan, E.D.P. Transmission of an alien telocentric addition chromosome in common wheat that confers blue seed color, 30
Whelan, E.D.P., and Thomas, J.B. Chromosomal location in common wheat of a gene (*Cmc1*) from *Aegilops squarrosa* that conditions resistance to colonization by the wheat curl mite, 1033
Whitehorn, J.A.F. see Jones, G.H., 611
Williams, S.E. see Rudd, N.L., 196
Winkelman, D.C., McMillan, I., Friars, G.W., and McKay, L.R. An experimental comparison of selection methods, 791
Winter, J.W. see Murray, J.D., 1119
Wise, D. see Spyropoulos, B., 275
Wolf, P.G., Soltis, P.S., and Soltis, D.E. Tetrasomic inheritance and chromosome pairing behaviour in the naturally occurring autotetraploid *Heuchera grossulariifolia* (Saxifragaceae), 655
Yadav, J.S., and Dange, M.P. On the cytology of two species of *Necrobia* (Oliv.) (Coleoptera: Cleridae), 165
Yamamoto, K. see Shintaku, Y., 251
Yen, Y. see Kimber, G., 1
Youssef, S.S., Morris, R., Baenziger, P.S., and Papa, C.M. Cytogenetic studies of progenies from crosses between 'Centurk' wheat and its doubled haploids derived from anther culture, 622
Yu, M.H. Genetic analysis of the dwarf curly leaf tomato mutant via hybridization with Curl and dwarf mutants, 359
Zadoo, S.N., Choubey, R.N., Gupta, S.K., and Sybenga, J. Meiotic chromosome association in diploid and tetraploid *Avena strigosa* Schrel., 972
Zelesco, P.A., and Graves, J.A.M. Chromosome segregation from cell hybrids. VI. Centromeres of both parental chromosome sets stain with antikinetochore antibody, 271
Zhang, H.-B. see Dvořák, J., 1003
Zhang, Q. see Jana, S., 40
Zhao, Z.-Y., and Weber, D.F. Male gametophyte development in monosomics of maize, 155
Zimmerman, P.A., Lang-Unnasch, N., and Cullis, C.A. Polymorphic regions in plant genomes detected by an M13 probe, 824
Zsuffa, L. see Rajora, O.P., 99
Zsuffa, L. see Rajora, O.P., 733

Volume 32 (1989)

SUBJECT INDEX / INDEX DES MATIÈRES

4S multigene family 456
5S DNA 1017
A genome 869
abnormal abdomen 754
achiasmatic meiosis 882, 890, 967
Acricotopus lucidus 941
additive gene action 19
Adh 349
Aegilops 169
Aegilops speltoides 1085
Aegilops squarrosa 724, 1033
Agaricus 173
Agaricus brunnescence (= *A. bisporus*) 173
age-related changes 389
Ag-NOR bands 1037
Agropyron 141, 640, 667, 1079
Agropyron tricophorum 30
alcohol dehydrogenase 349, 596
alfalfa 120, 318
allopolyploidy 796
allotriploid 404, 449
allozymes 99, 245, 440, 531
amphidiploid 179
amphiplasty 141
amphiploid 802
amylase 596
anaerobic induction 349
anaphase I 293
aneuploids 12, 373, 762, 962
aneuploidy 155, 196, 1068
anther culture 1068
antikinetochore staining 271
arctic char 129
Ascobolus immersus 414
Aspergillus nidulans 288
asymmetrical response 791
Atlantic salmon 1105
autopolyploid 420, 655
autotetraploid 1
Avena 346
Avena strigosa 972
avirulence 913
B chromosomes 64, 611
Bacillus thuringiensis 660
bacteriophage M13 824
barley 719
B-hordein genes 925
bimodality 1105
biotin-labeled probe 1091
bivalent 972
bivalent formation 802
BKm 865
black fly 500, 510, 516, 522, 531, 538, 543, 550
Brassica 408
Brassica napus L. 115, 1044
buffalo hybrids 999
buffaloes 999
Caenorhabditis briggsae 365
Caenorhabditis elegans 190, 365
canonical correlation analysis 40
cattle 856
C-banding 293, 629, 735, 834, 983, 1074
C-bands 901
CBG bands 1037
C-value 328
cell hybrids 271
cell size 667
centromeric heterochromatin 646
Cepaea nemoralis 908
Ceratitis capitata 580
characters 869
chiasma frequency 1054
chiasmata 275, 293, 393, 486
Chloealtis conspersa 596
chromatid cores 829
chromatin heterogeneity 208
chromocentre 510
chromosomal inversions 262, 550
chromosomal location 1017
chromosomal rearrangements 847, 935
chromosome 1 349
chromosome aberrations 622
chromosome banding by BrdU incorporation 425
chromosome breakage 196, 1085
chromosome elimination 953, 1063
chromosome evolution 516
chromosome nondisjunction 12
chromosome number changes 962
chromosome pairing 134, 346, 449, 468, 622, 640, 655, 901, 1079
chromosome polymorphism 882, 890
chromosome segregation 271, 999
chromosome structure 829
chromosome variation 251
chromosomes 129
Cleridae 165
climatic selection 908
clone–cultivar identification 99
clonal relationships 440
clone characterization 440
clone relationships 99
colchicine 475, 796
cold hardiness 667
cotton 12, 1128
CREST antibodies 271
Cupressaceae 245
curvilinearity 719
cytogenetics 6, 232, 550, 672, 1079, 1128
cytology 640
cytoplasmic effects 19
cytotaxonomy 522, 559, 589
Daphnia 1048
deficiency 155
desynapsis 1054
development 227, 288
diakinesis 404
diallels 771
dicot 824
diploid 179, 972
diplotene 816
disomic addition lines 408
DNA content 389

DNA fingerprint 865
DNA methylation 1003
DNA polymorphisms 365
dominance 19
Drosophila 146, 262, 754
Drosophila melanogaster 840, 847
durum wheat 1096
dwarfism 932
dynamic bandings 425
eastern white cedar 245
electromorphs 146
electrophoresis 146
Eliomys quercinus 978
Elymus 640
embryo rescue 282, 449
endoglucanases 288
environmental influence 40
enzyme deficiency 1026
enzyme-linked immunosorbent assay 1096
epistatic effects 359
equilocality 208
Erysiphe graminis 913, 918
evolution 1, 500, 510, 531, 538, 543, 550, 667
evolution, concerted 208, 1003
evolution, pivotal-differential 1
F_2 weakness 203
female meiosis 1054
Festuca 708
Festuca arundinacea 373
fitting, weighted versus unweighted 771
fluorescence banding 580
foxtail millet 203
freeze–thaw 196
gametocidal gene 1085
gametocional variation 622
gametophyte 232
gametophytic selections 946
GATA-GACA repetitive sequences 865
G-banding 935
gene dosage 667
gene mapping 1003
genes for insect resistance 449
genetic differentiation 203
genetic divergence 40
genetic map 724, 925
genetic mapping 365
genetic variation 1113
genetics 227
genic structures 120
genome 141, 179, 408, 468, 640, 796, 802
genome analysis 1, 82, 169, 691
genome relationship 930
genome size 834, 1048
genomic affinity 302
genomic DNA isolation 334
genotype 999
genotype × environment interaction 1105
genotypic structures 120
germ line limited chromosomes 941
gliadin 1096
Glossina 479
Glycine max 1091
Gossypium 762, 1128
Gossypium hirsutum cytogenetics
Gossypium mutants 1041
growth 227, 1105
GTG bands 1037
guayule 134, 1100
gymnosperm 824
heat shock 190
heat shock polypeptides 676
Helicoverpa 967
heritability 19, 115, 719
heterochromatin 35, 601, 672, 735, 847
heteroduplex DNA distribution 414
heterologous synapsis 601
heterosis 1074
heterozygotes 216
hexaploids 302
high chromosome number 328
high-resolution chromosome banding 425
Heuchera 655
holocentric chromosomes 882
homoeologues 293
Hordeum 629, 1124
Hordeum vulgare 40, 719, 925
hsp70 190
human 24
hybrid 179, 468, 802
hybrid inviability 251
hybrid sterility 479
hybridization, *in situ* 925, 992
hybridization, intergeneric 783
hybridization, interspecific 640, 796, 810, 1079
hybridization, intraspecific 796
hybridization, wide 251, 953, 1063
hybrids 262
hybrids, intergeneric 282
hybrids, interspecific 6, 146, 346, 667, 1079
idiogram 425
inbreeding depression 115
infrequent alleles 120
inheritance 245, 318, 869
insect biotypes 109
insect resistance 109
insect spermatogenesis 64
insect virulence 109
insertion element 349
intercalary heterochromatin 847
interchange 257, 882
interference 983
interspecific gene transfer 449
introgression 449
inversion phylogeny 570
isochromosomes 611
isolated nuclei 343
isozyme genes 655
isozymes 120, 245
karyotype 144, 165, 179, 629, 967, 1037, 1119
karyotypic variation 393
kinetochore 380
kinetochore immunofluorescence 196
Labridae 35
laggards 404
larvae 589
Lepidoptera 967
leucine aminopeptidase 687
Leymus 282
Lilium longiflorum 486
linkage 245, 869, 1041
linkage mapping 783
Liolaemus (Iguanidae) 393
localised pairing 275
Lophopyrum 141, 1003
Lycopersicon esculentum Mill. 359, 992
Lycopersicon pimpinellifolium (Jusl.) Mill. 359

macroevolution 1048
maize 232, 953, 962
malate dehydrogenase 596
male fertility restoration 1044
male meiosis 941, 1054
malic enzyme 596
mammal 391
mapping 869
Marsupialia 935
mathematical models 216
Medicago cancellata 302
Medicago papillosa 302
Medicago sativa 318
Medicago saxatilis 302
Mediterranean fruit fly 580
megasporogenesis 12
meiosis 24, 46, 72, 134, 141, 169, 179, 262, 380, 404, 468, 601, 640, 708, 802, 829, 972, 1074, 1100
meiotic analysis 216
meiotic behaviour 408
meiotic drive 840
meiotic model 82, 691
meiotic modeling 708
metaphase 72
methylated bands 208
micronuclei 196, 404
microspore 155
microsporogenesis 232
mitochondrial DNA 173, 340
mitotic arrest 475
mixoploidy 1068
molecular evolution 456
monolonal antibodies 1096
monocot 824
monosome 155, 1041
monosomic 762
morphology 468
mouse model 1026
multilocus genotype 40, 99, 440
multivalent formation 941
mutagenesis 1026
mutation 1085
natural rubber 134, 1100
N-banding 257
Neurospora crassa 309
new genus 328
nitrosoguanidine 660
NOR suppression 343
northern white cedar 245
nuclear envelope 601
nucleolar organizers 35, 829, 978
nucleolar organizing region activation 978
null allele 687
nullisome 155
oilseed rape 1044
oligosporogenous 660
onchocerciasis 559
Orthoptera 601
Oryza glaberrima 810
Oryza sativa 810, 1113
osprey 1037
ovule–embryo culture 6
oysters 687
ozone 660
pachytene 216
pachytene substages 856
pairing control gene 216
palm 328
Pandion haliaetus 1037
para-fluorophenylalanine 962
pearl millet 946, 1063
pericentric inversion 165
Petrogale 935
Petunia hybrida 46
ph genes 293
phosphoric amide herbicide 475
photoperiod 1105
phylogeny 141, 346
physical map 365
pink salmon 227
plasmids 660
ploidy 1091
ploidy shifts 1048
pol cytoplasmic male sterility 1044
pollen 232
pollen fertility 708
polymorphisms 129, 510, 908, 1113, 1124
polyphages 165
polyploid complex 796
polyploid induction 1100
polyploidy 82, 328, 691, 724
polytene chromosome 510, 516, 522, 570, 676
poplars 440
population dynamics 40
population structure 531
Populus deltoides 440
Populus ×*canadensis* 99
powdery mildew 913, 918
preferential pairing 691
prophase chromosomes 425
pseudogene 190
Pseudoroegneria 141
Puccinia graminis tritici 932
puffs 676
pulsed field gel electrophoresis 992
pupal weight 791
purine nucleoside phosphorylase 1026
Q banding 129
quadrivalent 972
quantitative genetics 420
quantitative inheritance 810
quantitative trait loci 783
radiation mutagenesis 847
rainbow trout 865
R-banding 425
rDNA 173
recombinant types 359
recombination 46
recombination nodules 275, 309, 486
recurrent selection 420
regeneration 1068
regression 719
repeated gene families 646
reproductive behavior 1100
resistance 559
restriction endonucleases 208, 672
restriction fragment length polymorphism 334, 724, 824, 1113
restriction fragment length polymorphism analysis 173
restriction map 340
restriction mapping 456
ribosomal DNA 754, 1124
rice 810, 1113
RNA transcripts 343
Robertsonian fusions 890
rRNA genes 1091
r-X1 155

rye 169, 735, 816, 901
rye grass 282
Salmo gairdneri 865
salmonid 340
Salvelinus alpinus 129
satellite DNA 646, 992
Schizaphis graminum 109
Secale 456
Secale cereale L. 19, 72, 983
segregation 24, 783
segregation distortion 203, 840, 946
selection 754, 791
senescence 389
sequence analysis 340
sequence variation 1017
sex chromosomes 275, 522, 538, 543, 580, 1119
sex chromosome mechanism 165
silver staining 829
Simuliidae 589
Simulium furculatum 522
Simulium ruficorne 570
Simulium vernum 522
size 227
solanaceous plants 743
Solanum 1054
somaclonal variation 373
somatic embryogenesis 318
somatic karyotype 992
somatic polyploidy 1048
speciation 538, 1119
spermiogenesis 64
stem rust resistance 932
sterility 762, 810
sterility, intraspecific 203
structural heterozygosity 890
supernumerary chromosome 516
superoxide dismutase 596
sympatric speciation 500
synapsis 601, 743, 983
synaptic 762
synaptic irregularities 743
synaptonemal complex 72, 309, 486, 601, 611, 743, 816, 856, 901
systematic theory 559
t(11;22)(q23;q11) 24
taxonomy of Gruidae 646
techniques 334
telomeres 901
telosome 1041
temperature 708
temperature shock 676
Tenebrionidae 834
test value 420
tetraploid 972
tetraploid wheat 257, 735
tetrasomic inheritance 655
thermotolerance 676
Thinopyrum 141
Thinopyrum bessarabicum 930
Thinopyrum elongatum 930
Thuja occidentalis L. 245
tissue culture 318, 373, 1128
tobacco 251
tomato 783
transgressive groups 359
translocation 72, 840, 983
transposable element 349
Tribolium 791
trigeneric hybrid 169
triploid 179
triploidy 393
Triticeae 179, 468, 640, 667
triticale 735, 1074
Triticum aestivum 109, 349, 622, 724, 932, 1068, 1085
Triticum diploids 216
Triticum species 1, 869, 1003
Triticum tauschii 1017
tstse 479
univalents 404
varietal ability 420
vector simuliid complexes 559
Voanioala 328
wheat 169, 282, 913, 918, 953, 1063, 1068
wheat evolution 1003
wheat streak mosaic virus 1033
wheatgrass 913, 918
wild rye 282
Wilhelmia equina 589
Wilhelmia lineata 589
X chromosomes 479
Zea mays 962